

# Agricultural and Industrial Development in the United States (1877–1914)

### **California Education and the Environment Initiative**

Approved by the California State Board of Education, 2010

## The Education and the Environment Curriculum is a cooperative endeavor of the following entities:

California Environmental Protection Agency
California Natural Resources Agency
Office of the Secretary of Education
California State Board of Education
California Department of Education
California Integrated Waste Management Board

## **Key Leadership for the Education and Environment Initiative:**

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## **Key Partners:**

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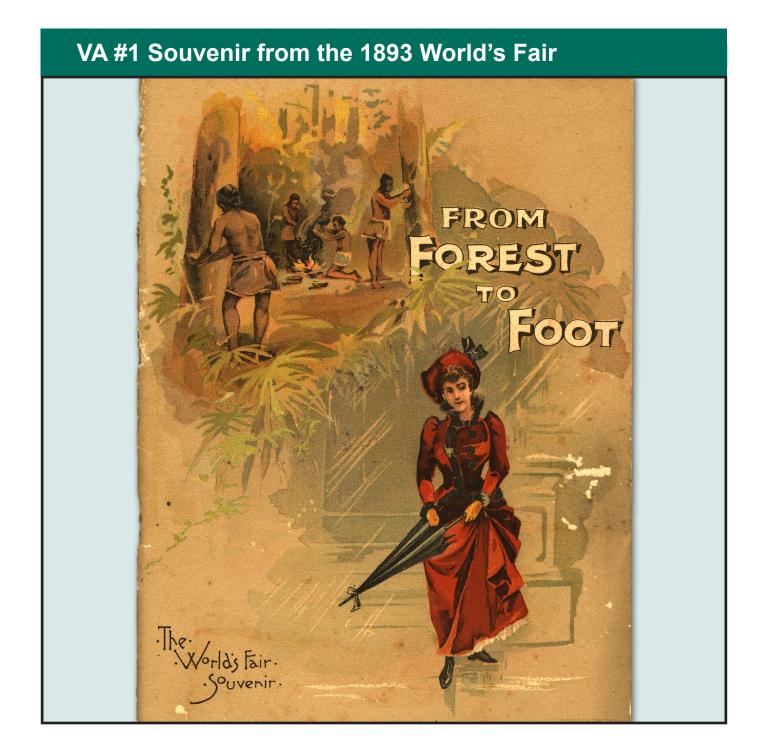
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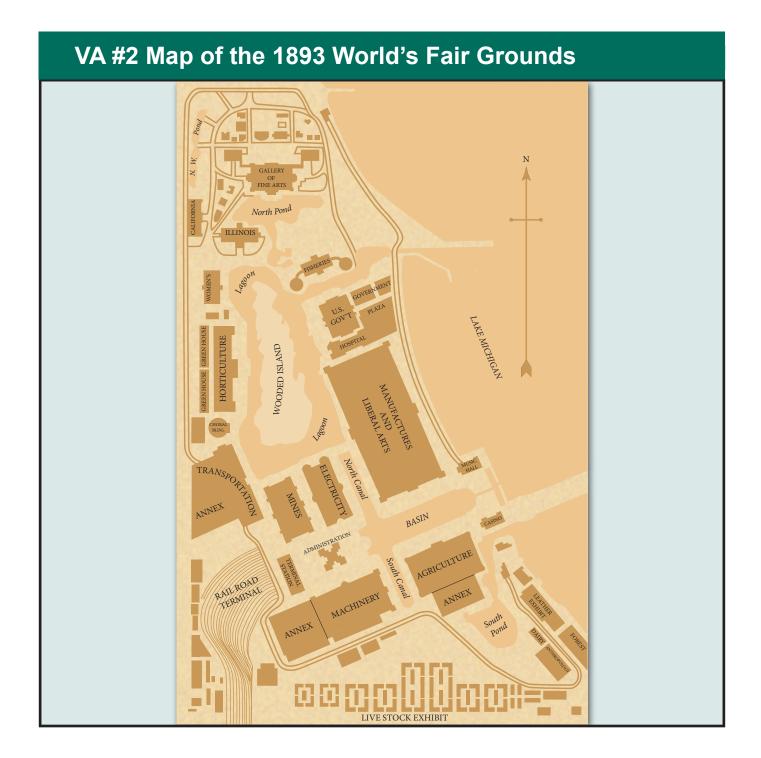


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# **Lesson 5** As the Century Turned: Considering Causes and Effects

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# VA #3 California Building at the 1893 World's Fair

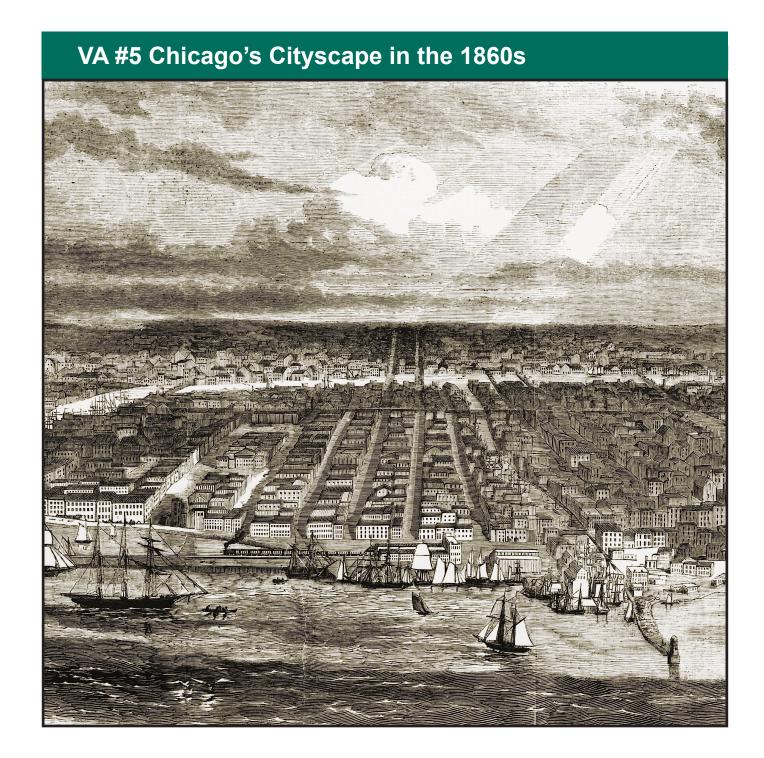
# **VA #4 Chicago Timeline and Facts**

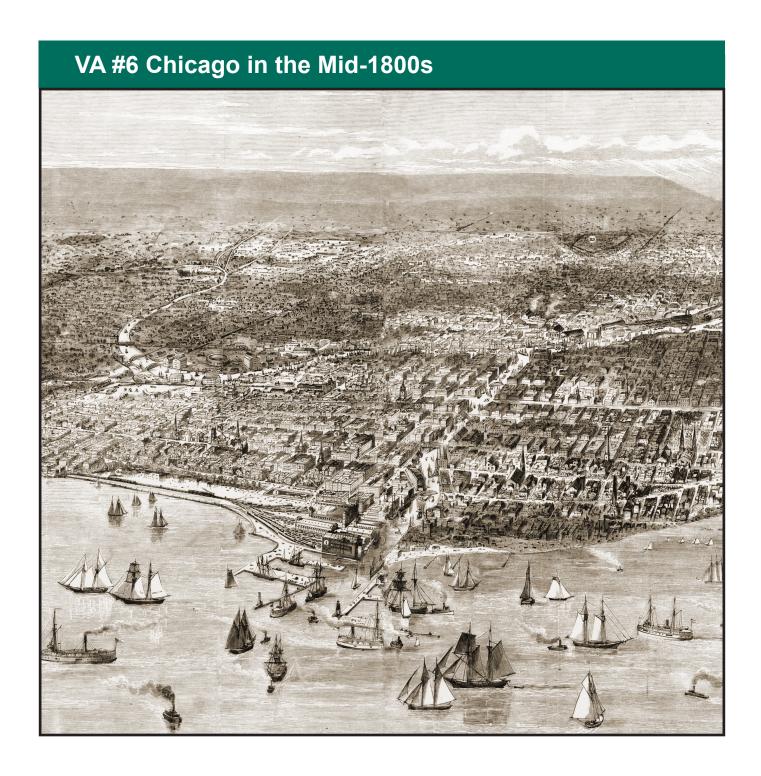
Climate: Hot and humid in summer; cold in winter; often windy.

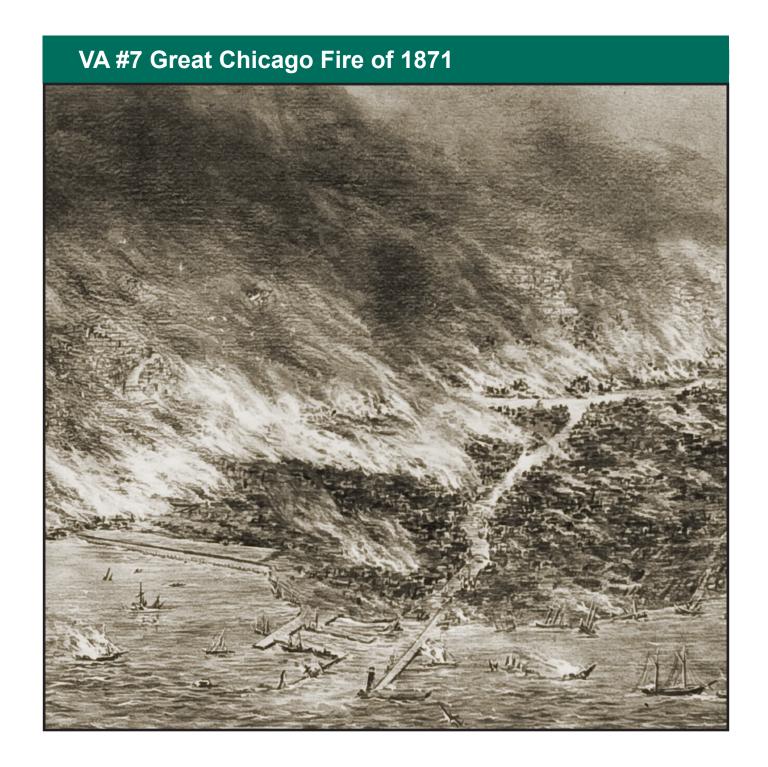
**Landscape:** Flat and swampy, with many trees; near a lake and river, with several streams in the area.

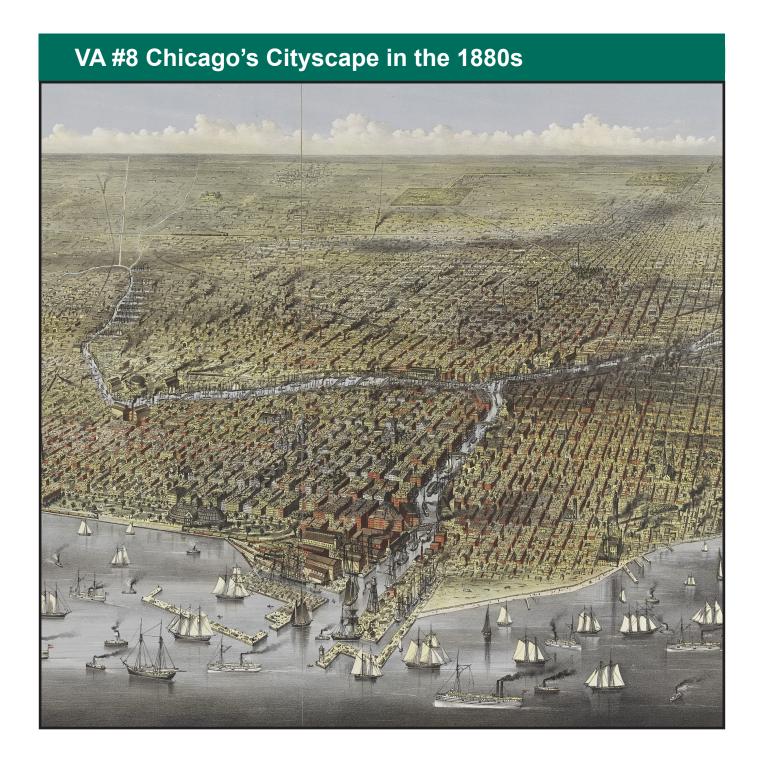
## **History:**

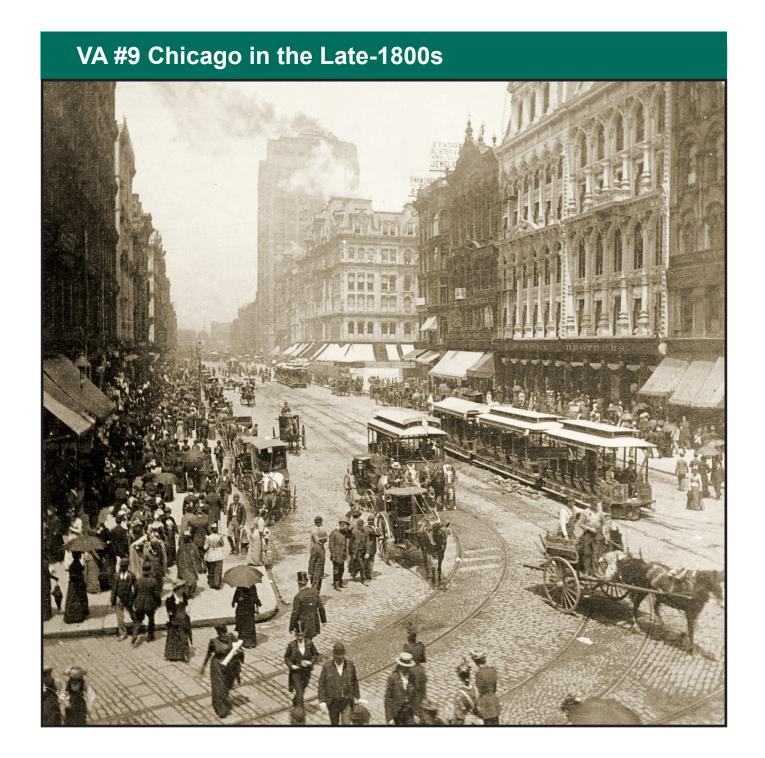
1770s	First permanent (European) settlement by Haitian trader Jean Baptiste Point du Sable
1802	U.S. Army builds Fort Dearborn
1816	Potawatomi Indians cede area to United States
1833	Town of Chicago organized with a population of 350
1836	Building of the Galena and Chicago Union Railroad
1847	McCormick Factory opened in Chicago
1848	Galena and Chicago Union Railroad opens
	Illinois and Michigan Canal opens
1848	Chicago Board of Trade founded
1850	Population of Chicago nears 30,000
1865	Union Stock Yards open
1870	Population of Chicago nears 300,000
1871	Great Chicago Fire
1880	Chicago's population surpasses half a million
1890	Chicago's population reaches 1 million
1893	Chicago World's Fair

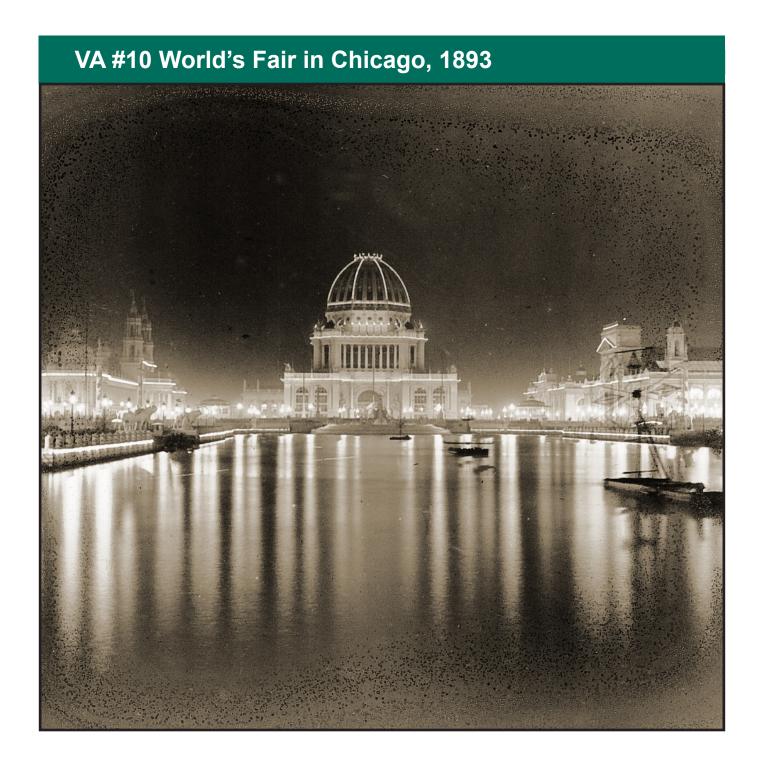






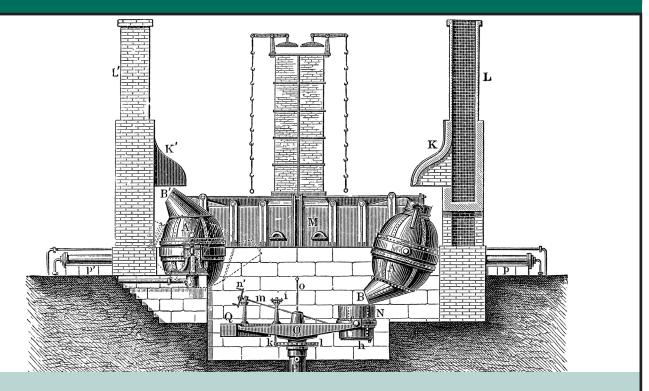




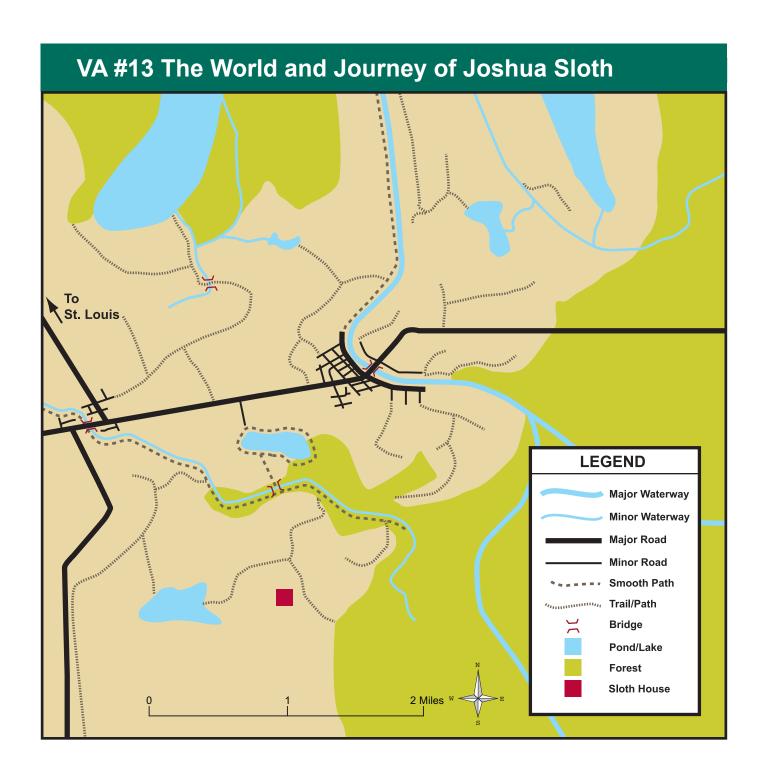


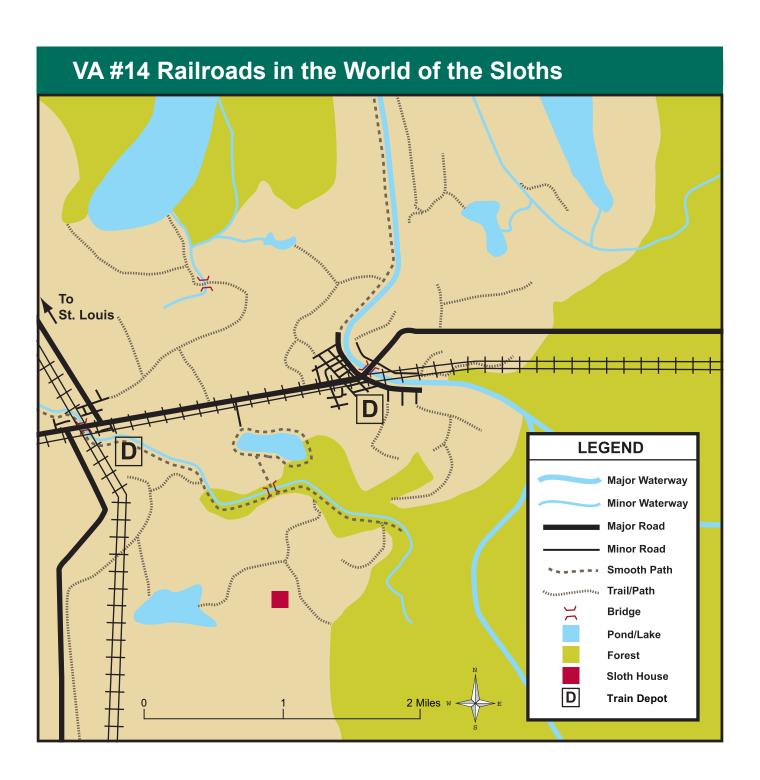
VA #11 New Technologies of the Second Industrial Revolution					
New Technologies	What does it do?	How is it changing the economy? What industries are affected?			
Bessemer Process					
McCormick Reaper					
Balloon Frame					
Barbed Wire					
Disassembly Line					
Refrigerated Car					

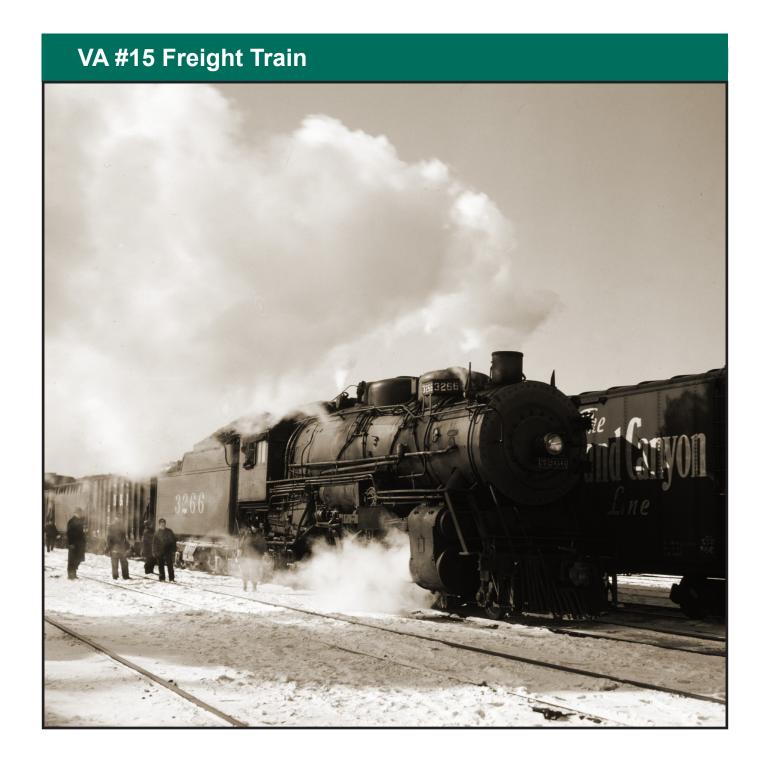
## **VA #12 Bessemer Process**



The Bessemer process was designed to make large amounts of molten steel from iron. In the mid-1800s, Sir Henry Bessemer took a process that had been used to make iron and modified it for the production of steel. In this process, air was blown through the iron (in the "barrels" shown above). This caused the impurities to burn off and raised the temperature enough to create steel. These changes in the process made steel cheaper and more plentiful. This allowed railroads to expand, from 30,000 miles of track in 1862 to almost 199,000 miles in 1900. At first, most of the steel went to make rails for the expanding railroad system. Eventually, builders started to use the steel in large buildings, bridges, and other structures, as well.







VA #16 Technology's Effects on the Environment					
Effects	Railroads	Refrigerated Car/ Disassembly Line	Balloon Frame	Barbed Wire	
Resources Used (extraction)					
Effects on Ecosystems					
Byproducts					

# **VA #17 Station Directions**

You are about to embark on a journey to several "stations." At each station is information about the political, economic, environmental, and cultural factors affecting economic development in the United wStates at the turn of the century.

# On your journey:

- Read the information about the development featured at each station.
- Write a short description of the development on **Developments Affecting Economic Growth**.
- Assign each development to a category to which it best belongs: "government action," "environmental influences," or "economics."
- Give a brief explanation of the effect of the development on the United States economy at that time.

You may work with your group to complete these tasks.

VA #18 Developments Affecting Economic Growth					
Development	What was it?	Category	Effect on the Economy		
Homestead Act of 1862					
Pacific Railway Act of 1862					
Internal Combustion Engine					
Deforestation of the American West					
Byproducts Industry					





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